

## ACKNOWLEDGEMENTS

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## HERPETOFAUNA OF GARDEN ISLAND

By DAVID ROBINSON, Duncraig, W.A. 6023,  
BRADFORD MARYAN, Lynwood, W.A. 6155 and  
ROBERT BROWNE-COOPER, Shenton Park, W.A. 6008

## INTRODUCTION

Little information is available on the herpetofauna of Garden Island. From July 1984 to February 1985, we visited the island on five weekend visits during which specimens were collected, identified and information was recorded on their habitat, distribution and relative abundance. Voucher specimens have been lodged at the W.A. Museum.

Garden Island extends between Latitude 32°09' and 32°14' and between Longitude 115°40' and 115°41' and is located 8 km north-west of Rockingham. It has a total land area of ca 1200 ha. The Australian Navy occupies ca 20% of the island, the remainder is managed by the Department of Conservation and Land Management as a National Park.

McArthur and Bartle (1981) recognised fifteen different vegetation communities; the dominant one is *Acacia rostellifera* scrub which covers more than half the island. *Callitris preissii Melaleuca lanceolata* forest dominates the northern end. In addition, some of the sub-dominant vegetation communities are: *A. rostellifera*/*M. lanceolata* scrub, littoral vegetation and cliff-top vegetation extending mainly along the western coastline. Collecting methods involved raking through leaf-litter and other surface debris, turning over rocks, logs and rubbish, spotlighting, head torching and the use of pit-fall traps with drift fences.

## ANNOTATED LIST

### Cheloniidae

*Caretta caretta*. Not collected during this survey. However, individuals have been sighted and collected at Point Peron, Shoalwater Bay and Safety Bay. This species probably inhabits Garden Island and its adjacent waters (Bob Goodale pers. comm.).

### Gekkonidae

*Diplodactylus spinigerus*. Common in *A. rostellifera* scrub, scarce elsewhere. Collected at night on bitumen road and perched on horizontal branches.

*Phyllodactylus marmoratus*. Found in *A. rostellifera* / *M. lanceolata* scrub. Active at night on rangers' headquarters and found beneath limestone slabs among cliff-top vegetation. Uncommon.

### Pygopodidae

*Lialis burtonis*. Collected throughout the island in most vegetation communities. Found active on bitumen road at night and observed during the day in low vegetation. Common.

### Scincidae

*Cryptoblepharus plagiocephalus*. Observed and collected in *A. rostellifera* scrub and *C. preissii* / *M. lanceolata* forest. Active on dead and living trees, also on man-made environments. Very common.

*Egernia kingii*. Observed and collected in littoral and cliff-top vegetation, scarce elsewhere. Very common.

*Hemiergis quadrilineata*. Collected throughout the island in most vegetation communities. Mainly found under dead logs and limestone rocks. Very common.

*Leiolopisma trilineatum*. Collected in *C. preissii* / *M. lanceolata* forest and pit-trapped in littoral vegetation. Uncommon.

*Lerista lineata*. Patchily distributed throughout the island. Scarce.

*Lerista praepedita*. Common in coastal vegetation but scarce elsewhere.

*Morethia lineocellata*. Not collected during this survey. The W.A. Museum has three records of this species from the island. (WAM R 28475-77).

*Morethia obscura*. Very common throughout the island, found in most vegetation communities.

*Tiliqua rugosa*. One specimen collected in *C. preissii* / *M. lanceolata* forest and one road kill found on limestone track in *A. rostellifera* / *M. lanceolata* scrub.

### Boidae

*Morelia spilota*. Three recorded, two in *A. rostellifera* / *M. lanceolata* scrub and one in cliff-top vegetation. Uncommon.

### Elapidae

*Notechis scutatus*. Although only three recorded, discussions with the island ranger and naval police indicated that they are common.

## Hydrophiidae

*Pelamis platura*. Not collected during this survey. However, four beached specimens have been collected on Garden Island by Bob Goodale (pers. comm.).

## DISCUSSION

Few turtles are recorded due to the southern location of the study area. Gecko species are limited; however, they are comparable to the low species richness on the adjacent mainland. A second species of Pygopodidae (*Aprasia repens*) which has been recorded on the adjacent mainland and nearby Rottnest Island, could possibly occur on Garden Island. This species may have eluded us due to its fossorial habits.

During this survey two *Tiliqua rugosa* were recorded; although no previous records are known from the island. We believe that the bobtail population on Garden Island has been in existence for a long time due to the number of sightings reported to us by the ranger and naval personnel. Whether it was introduced to the island by man cannot be determined.

Garden Island is considered to be the last stronghold of the Carpet Python (*Morelia spilota*) near Perth. The low number recorded by us may be due to our restricted survey time. The Carpet Python is a designated rare and endangered species.

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## TAXONOMIC AND NATURAL HISTORY NOTES ON *TYMPANOCRYPTIS BUTLERI* AND *T. PARVICEPS*

By ALLEN E. GREER, The Australian Museum,  
6-8 College Street, Sydney, New South Wales 2000

*Tympanocryptis butleri* and *T. parviceps* are small, light-coloured agamids inhabiting the light-coloured coastal sand dunes and nearby plains of central Western Australia. Both forms are considered to be closely related; so much so that they are often treated as subspecies (Storr 1977; Cogger 1983). The generic allocations of the forms have varied between *Tympanocryptis* (Storr 1964; Storr *et al.* 1983; Witten 1982 a & b; Storr and Harold 1984), *Amphibolurus* (Storr 1977; Storr and Hanlon 1980; Storr and Harold 1978, 1980) and an as yet un-named subgenus of *Amphibolurus* with *adelaidensis* and *diemensis* (Moody 1980). A critical issue in these different taxonomic allocations has been the number of